

## AMENDMENTS TO THE CLAIMS

1-45. (Cancelled)

46. (Currently Amended) A magnetic recording medium ~~having~~ comprising:

a disk substrate;

a recording film disposed on the disk substrate, the recording film being magnetically anisotropic; ~~at least a magnetically anisotropic recording film on a disk substrate, comprising~~

~~a lubricating layer disposed over at least the recording film; and film, with~~

~~a protective layer disposed between the lubricating layer and the recording film, the protective layer having a lower thermal conductivity than the recording film, film being interposed therebetween.~~

~~\_\_\_\_\_ wherein the protective layer comprises a plurality of thin films including a first thin film and a second thin film, the second thin film being closer to the recording film than the first thin film,~~

~~\_\_\_\_\_ wherein the thermal conductivity of the second thin film is higher than the thermal conductivity of the first thin film, and~~

~~\_\_\_\_\_ wherein the thermal conductivity of the second thin film is  $2.5 \times 10^5$  erg/(s·K·cm) or lower.~~

47-50. (Cancelled)

51. (Currently Amended) The magnetic recording medium according to ~~Claim 49, Claim 46,~~ wherein the protective layer ~~comprising a plurality of thin films has at least~~ includes a thin film ~~whose~~ with a thermal conductivity ~~is of~~ is  $1 \times 10^6$  erg/(s·K·cm) or less.

52. (Previously Presented) The magnetic recording medium according to Claim 46, wherein the main component of the protective layer is carbon.

53. (Previously Presented) The magnetic recording medium according to Claim 52, wherein the protective layer includes diamond-like carbon.

54. (Previously Presented) The magnetic recording medium according to Claim 53, wherein the protective layer includes nitrogen, oxygen, or hydrogen.

55. (Previously Presented) The magnetic recording medium according to Claim 54, wherein the nitrogen, oxygen, or hydrogen content is varied within the plurality of thin films of the protective layer.

56. (Previously Presented) The magnetic recording medium according to Claim 46, wherein the protective layer includes a material having heat resistance at a temperature of at least 250°C.

57. (Previously Presented) The magnetic recording medium according to Claim 56, wherein the heat resistant material is composed of a fluororesin or a ceramic material.

58. (Currently Amended) The magnetic recording medium according to Claim 56, wherein the heat resistant material is composed of [[Teflon®.]] polytetrafluoroethylene.

59. (Previously Presented) The magnetic recording medium according to Claim 46, wherein the protective layer includes a metal material.

60. (Previously Presented) The magnetic recording medium according to Claim 59, wherein the metal material is composed of titanium, tantalum, and chromium.

61. (Previously Presented) The magnetic recording medium according to Claim 59, wherein the metal material is composed of a nitrogen compound or an oxide.

62. (Currently Amended) The magnetic recording medium according to Claim 46, wherein the protective layer includes ~~at least~~ a chalcogen compound.

63. (Previously Presented) The magnetic recording medium according to Claim 46, wherein the lubricating layer comprises a plurality of thin films.

64. (Currently Amended) The magnetic recording medium according to Claim 63, wherein the plurality of thin films of the lubricating layer each have a different thermal conductivity.

65. (Previously Presented) The magnetic recording medium according to Claim 63, wherein the lubricating layer includes PFPE.

66. (Previously Presented) The magnetic recording medium according to Claim 63, wherein the lubricating layer includes a heat resistant material.

67. (Previously Presented) The magnetic recording medium according to Claim 63, wherein the lubricating layer includes an oxide or a nitride.

68. (Currently Amended) The magnetic recording medium according to Claim 46, ~~wherein~~ the wherein a combined thickness of the lubricating layer and the protective layer is at least 1 nm and no more than 100 nm.

69. (Currently Amended) The magnetic recording medium according to Claim 68, ~~wherein~~ the wherein a thickness of the lubricating layer is at least 0.5 nm and no more than 20 nm.

70. (Currently Amended) The magnetic recording medium according to Claim 68, ~~wherein~~ the wherein a thickness of the protective layer is at least 0.5 nm and no more than 99.5 nm.

71. (Currently Amended) The magnetic recording medium according to Claim 46, wherein the recording film includes a magnetic layer having magnetic anisotropy ~~in the~~ in a direction perpendicular to the film plane.

72. (Previously Presented) The magnetic recording medium according to Claim 46, wherein the recording film comprises a plurality of magnetic layers.

73. (Currently Amended) The magnetic recording medium according to Claim 72, wherein the recording film comprises ~~at least~~ a recording layer, an intermediate layer, and a reproduction layer, which are laminated over one another.

74. (Currently Amended) The magnetic recording medium according to Claim 73, ~~wherein~~ the wherein a recording domain formed on the recording layer in the recording film is transferred to the reproduction layer, and recorded information is reproduced by domain wall displacement in the reproduction layer.

75. (Currently Amended) The magnetic recording medium according to Claim 73, wherein the recording layer includes ~~at least~~ terbium, iron, and cobalt.

76. (Previously Presented) The magnetic recording medium according to Claim 73, wherein the recording layer is laminated intermittently and periodically for each layer of different material or compositional ratio.

77. (Previously Presented) The magnetic recording medium according to Claim 46, wherein a pit-shaped pattern is formed on the disk substrate according to the pattern of the recording domain formed in the recording layer.

78. (Previously Presented) The magnetic recording medium according to Claim 77, wherein a pit-shaped pattern that is smaller than the smallest pattern of the recording domain formed in the recording layer is formed on the disk substrate.

79. (Currently Amended) The magnetic recording medium according to Claim 77, wherein ~~at least a~~ metal layer with a high thermal conductivity is provided between the disk substrate and the recording film.

80. (Previously Presented) The magnetic recording medium according to Claim 79, wherein a dielectric layer is provided between the recording film and the metal layer.

81. (Previously Presented) The magnetic recording medium according to Claim 79, wherein a dielectric layer is provided between the disk substrate and the metal layer.

82. (Currently Amended) The magnetic recording medium according to Claim 79, wherein ~~at least the metal layer or~~ one of the metal layer and the dielectric layer has an etched ~~surface.~~ surface, and

wherein one of the metal layer and the dielectric layer has a surface roughness of at least 0.5 nm.

83. (Cancelled)

84. (Previously Presented) The magnetic recording medium according to Claim 80, wherein the dielectric layer includes at least a chalcogen compound.

85-88. (Cancelled)

89. (Previously Presented) A method for recording to or reproducing from a magnetic recording medium having at least a magnetically anisotropic recording film on a disk substrate, wherein information is recorded to or reproduced from the magnetic recording medium by applying a laser beam to the magnetic recording medium according to Claim 46 to raise the temperature of the recording film of the recording medium.

90. (Cancelled)

91. (New) The magnetic recording medium according to Claim 46, wherein each thin film of the plurality of thin films has a thermal conductivity of  $2.5 \times 10^5$  erg/(s·K·cm) or lower.